

A large, stylized wireframe head in profile, facing right. The head is composed of a mesh of blue and purple lines. Overlaid on the head is the word 'psic' in a large, bold, blue serif font. The letters 'p' and 's' are positioned on the left side of the head, while 'i' and 'c' are on the right side, near the face.

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School visits: health team of rehabilitation in the inclusive process of children with brain injury and developmental problems

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Abstract

This paper aims to analyze how conducting school visits can be configured as an opportunity to support inclusive school and development of children with brain damage and developmental problems. The rehabilitation process in childhood objectives to increase the quality of life of children, taking into account their peers and social spaces that take part. In school-age children, school appears as an important social context and can be related to quality of life. The defense for an inclusive school becomes central to the work of the interdisciplinary team of rehabilitation centers and teaching staff of the schools. In this study, it is understood that the school visits can be constituted as a significant tool in the field of ecological rehabilitation, within the context of individuals. The theoretical bases related to this paper are found in studies of Urie Bronfenbrenner, Mark Ylvisaker & Thimoty Fenney and Lucia Braga. This study aims to characterize the performance of school visits to the monitoring of children with brain injury inserted into a stimulation group at the Hospital Sarah Rehabilitation, unit of São Luís, Maranhão, Brazil. From this proposal will be discussed the configuration of school visits as an opportunity to support inclusive education process of children with brain injury, considering the legislation on education in Brazil. It was used as methodology to obtain data the direct observation during school visits, dialogues with the pedagogical team, documental analyses of electronic health team records. It has as results the prospect that the interdisciplinary team was formed as a support network, favoring school adaptation strategies through participation in the curriculum adaptation process, proposing strategies for environmental management behavior, diagnostic guidance, guidelines for motor and neuropsychological stimulation of children, consolidating its position as a relevant service in the inclusive process in schools.

Key words: School visits; Inclusive school; Network support; Hospital.



1. Introduction

The objective of this study is to examine how to carry out school visits by a Neurorehabilitation Hospital is configured as a service to support the inclusive education process of children with brain injury, considering interventions developed in São Luis unit, Maranhão, Brazil. São Luís is the capital of the state of Maranhão, located in northeastern Brazil, the state rated one of the worst educational indicators and the country's quality of life. To illustrate this point, one has that Maranhão is the penultimate in the country in Brazilian Education Opportunity Index (IOEB, 2015), averaging 3.6, and the national average is 4.5. The motivation for the development of this work is located in a practice with children with brain injury, in which one of the goals as a psychologist is focused on understanding the overall functioning of the child, evaluation of their cognitive, neuropsychological and behavioral development, and analysis of how these characteristics of development interfere in family life, school, and social life of the child, and the proposition of rehabilitation strategies. These are based on the structuring of an environmental management, educational proposals with family and other social actors, and discussion of complementary strategies with other specialists such as neurologists, child psychiatrists, pediatricians, physical educators, pedagogues and other professionals of the interdisciplinary team. The objective is that the strategies outlined can qualify the child's life and of their family and their participation in everyday environments. In childhood, one of the social spaces and more meaningful learning is the school. Thus, this research is justified by the possibility of contributing to the expansion of these intervention strategies within the field of psychology, education and rehabilitation.

The development methodology of this research consisted of observations during the visits, conversations with teaching staff of the schools visited, in addition to document analysis procedure through the electronic medical record information survey. In this work will be presented literature data on the inclusive education process, support networks that participate, interventions with children with brain injury, and proposed the presentation of the possible contributions of Neurorehabilitation Hospital through the characterization of school visits in monitoring children with brain injury inserted into a stimulation group at the Hospital Sarah Rehabilitation unit in São Luis / MA.


The article will be structured to include a brief contextualization of inclusion policy in Brazil, including education, specialized education and support services. After, data about Sarah Neurorehabilitation Network and care for children with brain injury will be presented in a proposal for rehabilitation based on context, followed by the characterization of school visits to a group of children in rehabilitation program. Finally, it will be discusses some challenges and perspectives on the development of this service.

2. Research Methodology

In the present work was characterized school visits in a group of 11 children participating in a group of neurodevelopmental stimulation. The children were between 7 to 11 years of age. All of them were included in the stimulation group and all had brain damage. They were followed by the interdisciplinary rehabilitation team for a variable period, with rehabilitation proposals which included stimulation of global development, and neuropsychological, motor, cognitive or behavioral issues.

The methodological procedures used for research included observations during school visits, conversations with parents, teachers and children; document analysis through electronic medical record data collection. The study data were analyzed in 2015 and include visits since 2009, year of the first visit made to one of the children present in the group, by the year 2015, year of the last visit made by the rehabilitation team for a child group.

Conversations about the visits and its developments were conducted when the children and family attended the sessions with the interdisciplinary team, with varying regularity. Conversations with teachers were held at school



before or after the observations. These observations consisted of information sources in cases where the collection of data was given more directly, allowing the researcher to cross the information obtained in interviews with family members and teachers. Finally, the document analysis completed the tripod of data collection. It is understood that the document analysis consists of a parallel and simultaneous source of other methodological procedures (SOUZA et al., 2011). In the case of this research, the documents used were electronic records, which correspond to records held by various members of the interdisciplinary team during the service time of children in hospital.

In addition to the above data collection tools, all data were analyzed based on parameters and individual qualitative analysis, considering the principles of ecological approach to development, in which emphasize the analyzes and interventions in natural environments and look to diversity featuring subjects - their psychological processes, their active participation in the environment, their personal characteristics and their historical and social-cultural construction (ALVES, 1997; BRONFENBRENNER, 2011).

3. Context of the inclusive policy: education, specialized education and support services

According to Alcântara (2013), to carry out a historical overview of the inclusive policy in Brazil, Special Education can be understood as a historical construction, a result of constant movement which necessarily refer to the formation of Brazilian society. In this sense, Jannuzzi (2006) points to the interrelationship between education offered to students with disabilities and the social, political and cultural undergone by Brazilian society.

Mazzotta (2005) states that the history of special education in the country opened in the nineteenth century with the organization of services to help blind, deaf and mentally and physically disabled. From the 60, the public administration came to understand that Special Education is set up as a topic of State obligations to society. At this historic moment, the Special Education was, in general, restricted to companies that provided services to the upper classes, leaving to the other part of society medical care (Mazzotta, 2005).


This picture, with some contextual changes, remained in the country until the 80's, when it began a more systematic discussion about the responsibility of public authorities across the education of persons with disabilities, linking State obligations to human rights.

Bueno (2004) analyzes that the expansion and democratization in Special Education answered to a segregating process of society that had a poor social environment and less stimulating than to the democratization of education. Due to this factor, the Special Education has been expanding its audience, from blind and deaf people, and incorporating mentally handicapped, disabled, children with severe mental disorders, and also people with conduct disorders, language and learning problems. However people with language and learning disorders were always a doubt to the discussion related to public or Special Education in Brazil.

In the late 80s and early 90s of the twentieth century, we see a process of greater coordination between special education and public policy. It is involved here the 1988 Constitution, the Declaration of Salamanca of 1994, the Law of Education Guidelines and Bases of 1996, among several other devices that culminated in the recent National Policy for Special Education from the perspective of Inclusive Education, 2008 (CARVALHO, 2006).

According to Alonso (2014), inclusive education comprises special education within the regular school, with a goal of transforming the school into a space for everyone. The proposal would be focused on promoting diversity and it considers that all students may have special needs at some point in their school life.

Considering the inclusion of children and adolescents who present special needs throughout their learning process, it is understood that there are needs that significantly interfere in the learning process and that require a



specific educational attitude to the school, for example, the use specialized resources and support to ensure the learning of all students.

The proposal for Inclusive Education in Brazil is anchored in specific legislation that guides the educational system. In this sense, the National Education Plan (PNE 2011-2020), the more recent regulation, establishes the new role of special education and addresses the specialized educational services. This support specialized provides support to the student about their special educational needs, such as the teaching of languages and specific codes of communication and signaling in the case of visual and hearing impairment; mediation thought to develop strategies in the case of intellectual impairment; adaptations of the material and the physical environment in the event of disability; different strategies for adaptation and regulation of behavior; expansion of educational resources and / or acceleration of content for high skills.

In the inclusive education we also have additional support to the learning process. Alonso (2014) points out that the family makes up the support network as the first institution and significantly important for the education of the students, a source of information for the teacher on children that points to the need of a relationship cooperation between school and family. Health professionals who work with the student, such as physical therapists, psychologists, teachers, speech therapists or physicians also make up the network and can clarify needs and suggest alternatives that might be beneficial in the learning process. In care for children with brain injury, interdisciplinary rehabilitation team can act as an important link and compose the support network that promotes inclusive education.

4. Sarah Network and children with brain injury

Sarah Network of Neurorehabilitation is a reference in Brazil in the treatment of neurological problems in children and adults. It consists of nine units and serves patients from all over the country. In childhood, most of the population served has a diagnosis of cerebral palsy or traumatic brain injury. Children and adolescents are met through various treatment modalities by an interdisciplinary health team (BRAGA et al., 2010). The unit of São Luís, Maranhão, is located in Monte Castelo district and has the Neurorehabilitation programs in Spinal Cord Injury, Neurological Rehabilitation and Orthopedics, where adults and children are admitted.

The main diagnoses related to Children's Rehabilitation treated in São Luís unit are: cerebral palsy; brain injury; spinal cord injury and traumatic brain injury; myelomeningocele; arthrogryposis; congenital clubfoot and neurogenic; normal variation (foot physiological level, knee valgus, varus knee); Legg Calve Perthes; poliomyelitis sequel; Congenital dislocation of hip and injury of obstetric brachial plexus (REDE SARAH, 2015).

In addition to hospital care, this unit has a community center, open to the public, consisting of Library, Toy Library and Creation Space, and large green area. In this space, the rehabilitation of patients gets a new component benefiting from the interface with the local community.

The SARAH Hospital has the Education Program and SARAH Network Accident Prevention, working out and lectures for students of public and private school systems. In the children's rehabilitation program, the most frequently attended population are children and adolescents with brain injury.

Catroppa and Anderson (2009), in a paper on rehabilitation of children who have suffered traumatic brain injury, indicate that common post injury changes include hyperactivity, difficulties in attention and memory, problems related to motor skills, executive function and learning academic content. All this can result in changes in the child's overall functioning and its participation in the school context. These authors point out that even new arrangements for inclusion in the school environment should be thought out and tasks adaptation strategies, relaxation time, distractors



for disposal and use of external resources to support.

Prigatano and Gray (2007), in a survey to assess factors that interfere with parental stress level of families whose children have suffered brain injury, show that despite of the severity of the injury, difficulties in school performance constitute major source of concern and indicate the need to be established an educational model that reflects the need for these subjects. The authors indicate the importance of effective communication with school staff in order to reduce conflicts between teachers, families and students and discuss the participation of professionals.

The literature has pointed to a wide range of intervention programs for children with brain injury. However, as pointed out by Braga et al. (2010), intervention procedures for specific deficits succeed only in specific target, but fail to generalization. In contrast to traditional intervention approach to skills development for children with brain injury, some authors have demonstrated the possibility of expanding the therapeutic effectiveness in that intervention programs are developed in the context and offer activities of particular interest and importance to subjects who need them (BRAGA et al, 2010; FEENEY; YLVISAKER, 2006). It is understood those group of interventions as contextual and ecological rehabilitation.

5. School Visits: the work of the interdisciplinary team as a support service to the inclusive school


Children who have a brain injury are accompanied by an individualized service model and rehabilitation proposals based on context and family participation. When they start treatment on the unit, children are evaluated by an interdisciplinary team of health and considering the demands brought by the family, targets are drawn to the rehabilitation program. These goals may include several areas of child development and social participation. A common focus of intervention refers to strategies to the educational process, whether in the insertion step or adaptations proposition throughout school participation in different stages of child development.

Within the service professionals who make up the interdisciplinary health team have their guided practice and anchored by a proposal for rehabilitation based on context, Sarah method of treatment (BRAGA & JR PAZ, 2008). Within this proposal, the team develops their professional activity together with family and looking for interventions that make sense in context and community in which the child is involved. In this perspective, it is understood that child development is mediated by the interaction with people nearby and sets up five basic principles of care in offering a quality service to the people in attendance.

Thus, it is intended: to create an appropriate individualized program to the specific stage of development of the child who is playful, using simple materials and integrating activities of different specialties in the same task to facilitate learning; develop a program based on viable and realistic goals, based on the motor prognosis, neuropsychological and child communication skills; ensure the integration of family, children and members of the rehabilitation team; contextualize the development program and integrate the child or adolescent to the community; support the family with support groups and informational meetings about the child's problem.

The data reported in this study refer to the treatment program of 11 children involved in neurodevelopmental stimulation program in the unit of São Luís, Maranhão. All children accompanied the group present the diagnosis of brain injury and had been accompanied by the team with focused targets for the overall stimulation, including motor, cognitive, behavioral and neuropsychological issues.

In the rehabilitation program, children are accompanied with families by interdisciplinary professionals who assists in conducting the rehabilitation program and articulates the indication reviews and support from other team members. Within the rehabilitation plan, participation in stimulation group is configured as a support tool to the spe-



cific program proposals. In groups, children are invited to activities of interest that are linked to each child specific goals. The objective is to develop activities that express particular interest and may, therefore, be more successful to the generalization of the acquired skills.

Participating children have different diagnoses and demands facing global development. The interdisciplinary rehabilitation team accompanies jointly the activities, promotes dialogue with family and other important actors in the development of the child (school, varied social environments) and provides support for the process of generalization and maintenance of the skills learned from participation in program. This intervention process occurs through consultations with the child and family, home and school visits, and promotion of a group of parents with all the family members who are part of the stimulation group.

The stimulation group to which refers this work consists of 11 children, with ages ranging between 7 to 11 years. Considering the total of the 11 children accompanied the group, 05 of them received school visits and 02 children had as a contact tool between rehabilitation team and school staff, the monitoring reports. In the group, to 04 children there was no direct contact between staff of rehabilitation and school staff, since the dialogue conducted by the family of the children was enough to answer questions of the school team and there was no specific barriers on the inclusive education process. However, the data show that most of the children were accompanied by direct contact between rehabilitation team and school staff through visits and / or sending reports.

There was promoted a total of 14 school visits between the years 2008 to 2015 in the study group. The average age at which was more frequent conducting visits was to 06 years. In the educational context in Brazil, this step is usually refers to the transition between preschool education and primary education, during which there is an increase in academic demands, demand level of school activities, and this may be a variable that contributes to an increase of demands for guidance and discussion of the overall development of children in rehabilitation program.


Of the 14 visits made 01 refers to community school; 05 refer to public schools; and 08 refer to private schools. Of the 07 children which there was direct contact of rehabilitation and school staff team, 02 children have cognitive and behavioral problems; 03 have only cognitive problems; 01 shows only behavior problems. This data correlates with data from the general literature of children with brain damage and problems related to development, as which shows that these problems usually have an impact on academic and learning process, demanding specific intervention on the rehabilitation program.

Among the objectives included in the direct interventions that were carried out it has been promoting curricular adaptation and management behavior (03 children); promote curricular adaptation (02 children); guide diagnosis and management of behavior (01 children); direct motor stimulation and curricular adaptation (01 children).

In all the visits were positive assessment by the rehabilitation team, school staff and family about the information sharing. This information may allow us to infer that the process of inclusive education in the evaluated children requires the contribution of different social actors, as also reported in the literature involving rehabilitation of children.

In the dialogues held with the teaching staff of schools a commonly-reported data refers to a perception of poor preparation of teaching staff for the care of children with specialized educational needs and the need for a more systematic investment policies that achieve this proposal.

In all the visits was highlighted by the rehabilitation team the importance of measured data through dialogue with teaching staff of the school and / or direct observation of the child at school. These data can increase the quality of assessment by the rehabilitation team, favoring the expansion of the perceptions of children's development and highlighting the relevance of a rehabilitation model based on the natural environment and the ecological assessments



or interventions. For the rehabilitation team professionals, conducting school visits also appears as a possibility to strengthen the bond with the child and his family, building indeed a rehabilitation beyond the hospital.

6. Final Considerations

The objective of this work was the presentation of possible contributions from the interdisciplinary team of Neurorehabilitation for inclusive education process of children with brain injury. In the survey it was found rehabilitation strategies designed by the interdisciplinary hospital staff, together with the family and school staff to qualify the learning process of children with cognitive, behavioral and neuropsychological problems as a complementary proposal for intervention in school, in an approach rehabilitation based on the context of the subject.

The description of the proposed interventions illustrated the possibility of health professionals constitute a pillar in the support network necessary for inclusive education process. It is considered that this research and the characterization of school visits in the group of children presented are significant, even considering the possibility of new demands arise in different stages of development and considering that effective interventions once to a stage of life require review and adjustments.

One of the aspects relevant to health professionals thought that work with children refers to the notion that the participation of professionals in school visits does not imply taking responsibility or disallow school staff in the evaluation process and propose strategies for the student. To think about assessment of the development of a child is to go beyond the identification of deficits and compensatory strategies. It involves a more global knowledge about the child, in which his interests, positive skills and capabilities need to be continually thought. And it is not an exclusive responsibility of the health professional team. In this process all agents are involved and can be tools for changes and to improve learning skills in natural contexts of which the child participates.

Likewise, the participation of health professionals in inclusive education process does not change the need for investment in education and teacher training process. There are interventions that can be thought of as complementary, but never in a perspective that an action excludes the other.

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